OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

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DIRECTION 77

NOV 20 1907

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Addition to the Official List of Specific Names in Zoology (a) of the specific names of thirty-four species belonging to the Phyla Protozoa, Coelenterata, Platyhelminthes, Nemathelminthes, and Annelida, each of which is the type species of a genus, the name of which was placed on the Official List of Generic Names in Zoology in the period up to the end of 1936 and (b) of five specific names which are currently treated as senior subjective synonyms of the names of such species

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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(16th December 1954)

DIRECTION 77

ADDITION TO THE "OFFICIAL LIST OF SPECIFIC NAMES IN ZOOLOGY" (a) OF THE SPECIFIC NAMES OF THIRTY-FOUR SPECIES BELONGING TO THE PHYLA PROTOZOA, COELENTERATA, PLATYHELMINTHES, NEMATHELMINTHES, AND ANNELIDA, EACH OF WHICH IS THE TYPE SPECIES OF A GENUS, THE NAME OF WHICH WAS PLACED ON THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" IN THE PERIOD UP TO THE END OF 1936, AND (b) OF FIVE SPECIFIC NAMES WHICH ARE CURRENTLY TREATED AS SENIOR SUBJECTIVE SYNONYMS OF THE NAMES OF SUCH SPECIES

RULING :—(1) The under-mentioned specific names of species belonging to the Classes severally specified below, each of which is the type species of a genus, the name of which was placed on the *Official List of Generic Names in Zoology* in the period up to the close of 1936 by the Rulings given in the *Opinions* cited in each case against the name in question are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below :—

(a) Class Rhizopoda

- (i) vulgaris Ehrenberg, [1830], as published in the combination Arcella vulgaris (specific name of type species of Arcella Ehrenberg, [1830]) (Opinion 77) (Name No. 1388);
- (ii) mantelli Morton, 1833, as published in the combination Nummulites mantelli (specific

name of type species of *Lepidocyclina* Gumbel, [1870]) (*Opinion* 127) (Name No. 1389);

(b) Class Ciliata

 (iii) truncatella Müller (O.F.), 1773, as published in the combination Bursaria truncatella (specific name of type species of Bursaria Müller (O.F.), 1773) (Opinion 104) (Name No. 1390);

(c) Class Mastigophora

(iv) globator Linnaeus, 1758, as published in the combination Volvox globator (specific name of type species of Volvox Linnaeus, 1758) (Opinion 75) (Name No. 1391);

(d) Class Sporozoa

(v) falciformis Eimer, 1870, as published in the combination Gregarina falciformis (specific name of type species of Eimeria Schneider, 1875) (Opinion 104) (Name No. 1392);

(e) Class Neosporidia

 (vi) miescherianum Kühn (J.), 1865, as published in the combination Synchytrium miescherianum (specific name of type species¹ of Sarcocystis Lankester, 1881) (Opinion 104) (Name No. 1393);

(f) Class Hydrozoa

(vii) *physalis* Linnaeus, 1758, as published in the combination *Holothuria physalis* (specific name of type species of *Physalia* Lamarck, 1801) (*Opinion* 80) (Name No. 1394);

¹ For the ascription of *Synchytrium miescherianum* Kühn, 1865, as the name for the type species of *Sarcocystis* Lankester, 1880 see Ruling (9) given in *Direction* 76 (: 231) which is being published simultaneously with the present *Direction*.

(g) Class Anthozoa

(viii) striatum Fleming, 1828, as published in the combination Lithostrotion striatum (specific name of type species of Lithostrotion Fleming, 1828 (Opinion 117) (Name No. 1395);

(h) Class Cestoda

- (ix) expansa Rudolphi, 1805, as published in the combination Taenia expansa (specific name of type species of Moniezia Blanchard, 1891) (Opinion 77) (Name No. 1396);
- (x) globipunctata Rivolta, 1874,² as published in the combination *Taenia globipunctata* (specific name of type species of *Stilesia* Stiles & Hassall, 1893²) (*Opinion* 77) (Name No. 1397);
- (xi) actinioides Diesing, 1835, as published in the combination *Thysanosoma actinioides* (specific name of type species of *Thysanosoma* Diesing, 1835) (*Opinion* 77) (Name No. 1398);
- (xii) proglottina Davaine, 1860, as published in the combination Taenia proglottina (specific name of type species of Davainea Blanchard & Railliet, 1891) (Opinion 84) (Name No. 1399);
- (xiii) canina Linnaeus, 1758, as published in the combination Taenia canina (specific name of type species of Dipylidium Leuckart, 1863) (Opinion 84) (Name No. 1400);

(xiv) avium Bloch, 1782, as published in the combination Ligula avium (specific name of type

² The date "1874" is here attributed to the name *Taenia globipunctata* Rivolta in accordance with Ruling (8) given in *Direction* 76 (: 230). The generic name *Stilesia* is here attributed to "Stiles & Hassall, 1893" instead of to "Railliet, 1893" in accordance with Ruling (7) in the same *Direction* (: 230).

OPINIONS AND DECLARATIONS

species of *Ligula* Bloch, 1782) (*Opinion* 104) (for use by specialists who are of the opinion that the taxon so named is distinct from that represented by the nominal species *Fasciola intestinalis* Linnaeus, 1758) (Name No. 1401);

(i) Class Trematoda

- (xv) appendiculata Rudolphi, 1802, as published in the combination Fasciola appendiculata (specific name of type species of Hemiurus Rudolphi, 1809) (Opinion 77) (Name No. 1402);
- (xvi) haematobium Bilharz, 1852, as published in the combination Distoma haematobium (specific name of type species of Schistosoma Weinland, 1858³) (Opinion 77) (Name No. 1403);
- (xvii) hepatica Linnaeus, 1758, as published in the combination Fasciola hepatica (specific name of type species of Fasciola Linnaeus, 1758) (Opinion 84) (Name No. 1404);
- (xviii) heterophyes Siebold, [1852], as published in the combination Distomum heterophyes (specific name of type species of Heterophyes Cobbold, 1866) (Opinion 84) (Name No. 1405);

(j) Class Nematoda

(xix) duodenale Dubini, 1843, as published in the combination Agchylostoma [sic] duodenale (specific name of type species of Ancylostoma (emend. of Agchylostoma⁴) Dubini, 1843) (Opinion 66) (Name No. 1406);

³ The name *Schistosoma* Weinland was found to be invalid after it had been placed on the *Official List of Generic Names in Zoology* and was thereupon validated under the Plenary Powers by the Ruling given in *Opinion* 226 (1954, *Ops. Decls. int. Comm. zool. Nomencl.* 4:177–200).

⁴ The spelling *Ancylostoma* for the name published as *Agchylostoma* is here accepted as a Valid Emendation in accordance with Ruling (10) given in *Direction* 76 (: 231).

- (xx) *lumbricoides* Linnaeus, 1758, as published in the combination *Ascaris lumbricoides* (specific name of type species of *Ascaris* Linnaeus, 1758) (*Opinion* 66) (Name No. 1407);
- (xxi) spinigerum Owen, [1837], as published in the combination Gnathostoma spinigerum (specific name of type species of Gnathostoma Owen, [1837]⁵) (Opinion 66) (Name No. 1408);
- (xxii) americana Stiles, 1902, as published in the combination Uncinaria americana (specific name of type species of Necator Stiles, 1903⁶)
 (Opinion 66) (Name No. 1409);
- (xxiii) retortaeformis Zeder, 1800, as published in the combination Strongylus retortaeformis (specific name of type species of Trichostrongylus Looss, 1905) (Opinion 66) (Name No. 1410);
- (xxiv) martis Gmelin, [1790], as published in the combination Filaria martis (specific name of type species of Filaria Müller (O.F.), 1787) (Opinion 104) (Name No. 1411);
 - (xxv) schachtii Schmidt, 1871, as published in the combination Heterodera schachtii (specific name of type species of Heterodera Schmidt, 1871) (Opinion 104) (Name No. 1412);
- (xxvi) equinus Müller (O.F.), 1780, as published in the combination Strongylus equinus (specific name of type species of Strongylus Müller (O.F.), 1780) (Opinion 104) (Name No. 1413);

⁵ The date "[1837]" is here attributed to the name *Gnathostoma* Owen in accordance with Ruling (4) given in *Direction* 76 (: 230).

⁶ The name Necator Stiles was found to be invalid after it had been placed on the Official List of Generic Names in Zoology and was thereupon validated under the Plenary Powers by the Ruling given in Opinion 201 (1954, Ops. Decls. int. Comm. zool. Nomencl. 3 : 267-274).

(xxvii) *trachea* Montagu, 1811, as published in the combination *Fasciola trachea* (specific name of type species of *Syngamus* Siebold, [1852]) (*Opinion* 104) (Name No. 1414);

(k) Class Acanthocephala

(xxviii) echinodiscus Diesing, 1851, as published in the combination Echinorhynchus echinodiscus (specific name of type species of Gigantorhynchus Hamann, 1892) (Opinion 84) (Name No. 1415);

(l) Class Nematomorpha

- (xxix) aquaticus Linnaeus, 1758, as published in the combination Gordius aquaticus (specific name of type species of Gordius Linnaeus, 1758) (Opinion 66) (Name No. 1416);
 - (xxx) varius Leidy, 1851, as published in the combination Gordius varius (specific name of type species of Paragordius Camerano, 1897) (Opinion 66) (Name No. 1417);

(m) Class Hirudinea

- (xxxi) *medicinalis* Linnaeus, 1758, as published in the combination *Hirudo medicinalis* (specific name of type species of *Hirudo* Linnaeus, 1758) (*Opinion* 75) (Name No. 1418);
- (xxxii) nilotica Savigny, 1822, as published in the combination Bdella nilotica (specific name of type species of Limnatis Moquin-Tandon, 1827) (Opinion 104) (Name No. 1419);
- (xxxiii) *ceylanica* Blainville, [June] 1827, as published in the combination *Hirudo ceylanica* (specific name of type species of *Haemadipsa* Tennent, 1859) (*Opinion* 104) (Name No. 1420);

(n) Class Chaetopoda

(xxxiv) albidus Henle, 1837, as published in the combination Enchytraeus albidus (specific name of type species of Enchytraeus Henle, 1837) (Opinion 104) (Name No. 1421).

(2) The under-mentioned specific names, which are currently regarded as senior subjective synonyms of the specific names of the type species of genera, the names of which were placed on the *Official List of Generic Names*. *in Zoology* in the period up to the end of 1936 by the Rulings given in the *Opinions* severally specified below, are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below :—

(a) Class Mastigophora

 (i) rotatoria Mayer (A.F.J.C.), [July]⁷ 1843, as published in the combination Amoeba rotatoria (Opinion 95) (Name No. 1422);

(b) Class Cestoda

(ii) *intestinalis* Linnaeus, 1758, as published in the combination *Fasciola intestinalis* (*Opinion* 104) (Name No. 1423);

(c) Class Trematoda

- (iii) aegyptiacum Cobbold, 1876, as published in the combination Diplostomum aegyptiacum (Opinion 84) (Name No. 1424);
- (iv) dendriticum Rudolphi, 1819, as published in the combination Distoma dendriticum (Opinion 77) (Name No. 1425);

⁷ The notation "[July]" is inserted here before the date "1843" for the name *Amoeba rotatoria* Mayer in accordance with Ruling (6) given in *Direction* 76 (see page 230 of the present volume).

OPINIONS AND DECLARATIONS

(d) Class Nematoda

(v) stercoralis Bavay, 1876, as published in the combination *Rhabditis stercoralis* (Opinion 66) (Name No. 1426).

I. THE SUBJECT MATTER OF THE PRESENT "DIRECTION"

The present *Direction* completes the eighth and concluding instalment of *Directions* embodying the result of the review of the entries on the *Official List of Generic Names in Zoology* made by Rulings given in *Opinions* published up to the end of 1936 undertaken by the International Commission in accordance with a General Directive issued to it by the Thirteenth International Congress of Zoology. In the present *Direction* a review is made of the entries on the *Official List* made in the foregoing period in respect of the names of genera belonging to the Phyla Protozoa, Coelenterata, Platyhelminthes, Nemathelminthes, and Annelida and additions are made to the *Official List of Specific Names in Zoology* in compliance with the General Directive referred to above. The proposals upon which the decisions embodied in the present *Direction* were based were submitted by the Secretary on 16th November 1956 in the following paper :—

Proposed addition to the "Official List of Specific Names in Zoology" (a) of the specific names of thirty-four species belonging to the Phyla Protozoa, Coelenterata, Platyhelminthes, Nemathelminthes, and Annelida, each of which is the type species of a genus, the name of which was placed on the "Official List of Generic Names in Zoology" in the period up to the end of 1936 and (b) of four specific names which are currently treated as senior subjective synonyms of the names of such species

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The present paper contains the eighth and concluding instalment of proposals for giving effect to the General Directive issued to the

International Commission on Zoological Nomenclature by the Thirteenth International Congress of Zoology, Paris, 1948, that in every case where the specific name of the type species of a genus, the name of which had been placed on the *Official List of Generic Names in Zoology* in the period up to the end of 1936, is the oldest available name for the species concerned, that name shall be placed on the *Official List of Specific Names in Zoology* and that in other cases the specific name currently regarded as the oldest available subjective synonym of that name shall be similarly placed on that *List*. The immediately preceding instalment, which completed the consideration of the foregoing problem in relation to the names of the type species of genera belonging to the Phyla Mollusca, Brachiopoda, Echinodermata and Chordata (Z.N.(S.) 1124), was submitted to the International Commission on 28th August 1956 with Voting Paper V.P.(O.M.)(56)21.⁸

2. The proposals now submitted relate to the names of the type species of genera belonging to the Phyla Protozoa, Coelenterata, Platyhelminthes, Nemathelminthes and Annelida. The number of names of genera belonging to the foregoing Phyla, the names of which were placed on the *Official List* in the period under review was fortynine. These names were placed on the *Official List* by Rulings given in the following *Opinions*: *Opinion* 66 (nine names); *Opinion* 75 (three names); *Opinion* 77 (nine names); *Opinion* 80 (one name); *Opinion* 84 (nine names); *Opinion* 95 (two names); *Opinion* 104 (fourteen names); *Opinions* 117 and 127 (one name each).

3. In four cases it has already been found necessary to use the Commission's Plenary Powers to validate, or to correct, the entries made on the *Official List of Generic Names in Zoology* in the *Opinions* referred to above and in each of these cases the opportunity was taken to place on the *Official List of Specific Names in Zoology* the specific name of the type species of the genus concerned. The specific names concerned are the following :—

(1) solium Linnaeus, 1758, as published in the combination *Taenia* solium, placed on the *Official List* with the Name Number 95 by the Ruling given in *Opinion* 272.

Separate action was required in this case because the entry on the *Official List of Generic Names in Zoology* of the above species as the type species of *Taenia* Linnaeus, 1758, by the Ruling given in *Opinion* 84 was found to be incorrect and could only be regularised by the use of the Commission's Plenary Powers.

⁸ The decision taken by the International Commission on the Voting Paper here referred to has since been embodied in *Direction* 73 (1957, *Ops. Decls. int. Comm. zool. Nomencl.* 1(E) : 193-214) (2) falciparum Welch, 1897, as published in the combination Haematozoon falciparum, placed on the Official List with the Name Number 112 by the Ruling given in Opinion 283,

and

(3) malariae Feletti & Grassi, 1889, as published in the combination Haemamoeba malariae, placed on the Official List with the Name Number 113 by the Ruling given in the foregoing Opinion.

> Investigations showed that the entries on the Official List in respect of the generic names Laverania Feletti & Grassi, 1889, and Plasmodium Marchiafava & Celli, 1885, made by the Ruling given in Opinion 104 were incorrect in almost every particular. In order to give valid force to the entries on the Official List which the Commission had attempted to make by the Ruling given in the above Opinion, it was found necessary in Opinion 283, to have extensive resort to the Commission's Plenary Powers. As part of the settlement so effected the original entries on the Official List were replaced by revised entries in which, inter alia, the above species were designated under the Plenary Powers to be the type species of Laverania Feletti & Grassi and Plasmodium Marchiafava & Celli respectively.

(4) blattae Bütschli, 1878, as published in the combination Amoeba blattae, placed on the Official List with the Name Number 176 by the Ruling given in Opinion 312

In this case action was required to correct the Ruling given in *Opinion* 95, not because of any defect in the entry therein relating to the above name (which was there correctly stated to be the name of the type species of *Endamoeba* Leidy, 1879), but in order to correct the erroneous rejection by that Ruling of *Entamoeba* Casagrandi & Barbagallo, 1895, as a junior homonym of *Endamoeba* Leidy, 1879.

4. In one other case a generic name belonging to one of the Phyla with which the present paper is concerned has been the subject of a later Ruling by the Commission, this action having been rendered necessary by reason of the fact that the generic name in question (*Schistosoma* Weinland, 1859) was a junior objective synonym of a long-overlooked name of older date (*Bilharzia* Meckel von Hemsbach, 1856) which it was then necessary for the Commission to suppress under the Plenary Powers in order to validate the entry of the name *Schistosoma* Weinland on the *Official List*. In the *Opinion* (*Opinion* 226) in which the foregoing action was taken the Commission (contrary to the procedure followed in the *Opinions* cited in paragraph 3 above) did not place the specific name of the type species of *Schistosoma* Weinland on the *Official List of Specific Names in Zoology*.

276

Accordingly, a recommendation in the foregoing sense is included in the proposals submitted with the present paper.

5. The investigations carried out by the Office of the Commission show that in the case of seven of the genera falling in the present group further action by the Commission is required before the specific names of the type species of these genera can be placed on the *Official List of Specific Names in Zoology*. In consequence these names have been postponed for further consideration. The names in question are the following :—

(1) Hydra Linnaeus, 1758 (Z.N.(S.) 561)

The name *Hydra* Linnaeus, 1758 (Class Hydrozoa) was placed on the *Official List of Generic Names in Zoology* by a Ruling given in *Opinion* 77. The difficulty in this case arises from doubts as to the interpretation of the nominal species which is the type species of this genus.

(2) Hymenolepis Weinland, 1858 (Z.N.(S.) 1156)

The name *Hymenolepis* Weinland, 1858 (Class Cestoda) was placed on the *Official List* by the Ruling given in *Opinion* 77. The nominal species which apparently is currently accepted as the type species of this genus is not the one designated as such when the genus was first established by Weinland.

(3) and (4) Anoplocephala Blanchard, 1848, and Echinococcus Rudolphi, 1801 (Z.N.(S.) 1157)

The names Anoplocephala Blanchard, 1848, and Echinococcus Rudolphi, 1801, are both names of genera belonging to the Class Cestoda. The former was placed on the Official List by a Ruling given in Opinion 77, the latter by a Ruling given in Opinion 84. The difficulty in each of these cases is the same, namely that the specific name of the type species was published in a non-binominal work, Goeze's Versuch of 1782.

(5) Dracunculus Reichard, 1759 (Z.N.(S.) 553)

The name *Dracunculus* Reichard, 1759 (Class Nematoda) was placed on the *Official List* by a Ruling given in *Opinion* 66. The difficulty in this case arises from the fact that the work in which this name was first published is non-binominal. In order to secure the position of this name it will therefore be necessary for the Commission to validate it either from Reichard, 1759, or from some later author and work.⁹

⁹ An application in regard to the generic name *Dracunculus* Reichard has since been published in the *Bulletin of Zoological Nomenclature* (Hemming, 1957, *Bull. zool. Nomencl.* 13: 154–159).

(6) Rhabditis Dujardin, [1844] (Z.N.(S.) 937)

The name *Rhabditis* Dujardin, [1844] (Class Nematoda) was placed on the *Official List* by a Ruling given in *Opinion* 77. The identity of the taxon represented by the type species of this genus is at present uncertain and requires further investigation.

(7) Lumbricus Linnaeus, 1758 (Z.N.(S.) 272)

The name Lumbricus Linnaeus, 1758 (Class Chaetopoda) was placed on the Official List by a Ruling given in Opinion 77. The difficulty in this case arises from the fact that the Linnean species which is the type species of this genus is, it is agreed by specialists, a composite, and it has not yet been possible to trace by whom, when, and where, an effective First Reviser selection was made for this nominal species. In consequence, it has not been possible to determine whether current practice is in harmony with the provisions of the Règles. (In so far as some specialists appear to have dropped altogether the use of the specific name terrestris, that action clearly calls for consideration by the Commission, for it would be quite inappropriate to have on the Official List a generic name (Lumbricus) the specific name (terrestris) of the type species of which is a discarded nomen dubium.)

(PARENTHETICAL NOTE TO COMMISSIONERS: If any member of the Commission possesses any first-hand knowledge in regard to the problems involved in connection with any of the names discussed above or is in touch with any specialist who possesses such knowledge, it will be a great help if he will, in the first case, communicate to this Office his information in regard to the name in question or, in the second case, ask any colleague who may possess such knowledge to write to this Office on the subject. As all Commissioners will agree, it is a grave embarrassment to the Commission as a body that it is still unable to comply with the widespread desire of zoologists in many parts of the world to arrange for the publication of the "Official List" in book-form, by reason solely of the existence of unsolved problems in regard to entries on the "List" made with insufficient care in the period before the close of 1936.)

6. From the particulars given in paragraphs 3 and 5 above it will be seen that of the forty-nine names of genera falling within the group dealt with in the present paper, the specific names of the type species of four of the genera concerned have already been placed on the *Official List of Specific Names in Zoology* (paragraph 3), while in the case of seven other names unresolved difficulties of various kinds make it impossible to submit recommendations at the present time for the addition to the foregoing *Official List* of the specific names of the respective type species of the genera concerned (paragraph 5). Accordingly, the number of names on which recommendations are now submitted is reduced to thirty-eight.

7. As on previous similar occasions the search of the literature undertaken by the Office of the Commission for the purpose of checking and, where necessary, completing, the entries on the *Official List* in the period under review has disclosed a number of problems which require to be brought to the attention of the International Commission. These problems are discussed in a paper numbered Z.N.(S.) 1125, which is being submitted to the Commission with Voting Paper V.P.(O.M.)(56) 26, simultaneously with the present paper.¹⁰

8. The elucidation of the problems involved in the present group of names has been rendered possible by the co-operation and assistance afforded by a number of specialists. To all of these the grateful thanks of the International Commission are due. The specialists who have assisted in this way, together with particulars (a) of their present appointments or of the appointments which they held at the time when consultations took place and (b) of the Classes on the names of genera of which assistance has been afforded, are the following :---

- H. A. Baylis (British Museum (Natural History), London) (Class Nematoda)
- L. Cernosvitov (Reading, England) (Class Chaetopoda)
- Ellsworth C. Dougherty (University of California, Berkeley, California, U.S.A.) (Class Nematoda)
- R. F. Ewer (*Natal University College, Pietermaritzburg, South Africa*) (Class Hydrozoa)
- H. Munro Fox (Bedford College, University of London) (Class Chaetopoda)
- A. Gillard (*Rijkslandbouwhogeschool*, *Ghent*, *Belgium*) (Class Nematoda)
- E. M. Hering (Humboldt-Universität zu Berlin) (Class Protozoa)
- C. A. Hoare (*The Wellcome Laboratories of Tropical Medicine, London*) (Class Protozoa)
- Karl Jordan (British Museum (Natural History), The Zoological Museum, Tring, Herts, England) (Class Hirudinea)
- R. T. Leiper (Institute of Animal Parasitology, St. Albans, England) (Class Nematoda)
- S. Prudhoe (British Museum (Natural History), London) (Class Trematoda)

¹⁰ The paper here referred to has since been reproduced in the first paragraph of *Direction* 76 (: 239-258) which is being published simultaneously with the present *Direction*.

W. J. Rees (British Museum (Natural History), London) (Class Hydrozoa)

M. Ricci (University of Rome, Italy) (Class Cestoda)

A. K. Totton (British Museum (Natural History), London) (Class Hydrozoa).

9. In submitting to the International Commission the present paper which is the concluding portion of the eighth instalment of, and the sixteenth paper arising out of, the general review of the entries made on the *Official List of Generic Names in Zoology* in the period up to the end of 1936, I wish to express my special gratitude to Miss D. N. Noakes, B.Sc., who was appointed in 1954 to take charge of this work under my directions and to whom I am greatly indebted for the skill, accuracy and enthusiasm with which she has carried out the long and often difficult investigations involved.

10. Within the field covered by the present paper the search of the literature shows that in thirty-four cases the specific name of the type species of the genus concerned is not only an available name but is in addition accepted as the oldest such name for the species concerned. These names are enumerated in Annexe 1 to the present paper. In three of the four remaining cases the specific name of the type species of the genus in question is also an available name but is currently treated by specialists as a junior subjective synonym of another name. In the fourth case the specific name of the type species of the genus concerned is invalid, being a junior primary homonym of an identical name previously published for a different taxon. Particulars of these four cases are given in Annexe 2 to the present paper.

11. It is recommended that in accordance with the General Directive referred to in the first paragraph of the present paper the International Commission on Zoological Nomenclature should place on the *Official List of Specific Names in Zoology* :---

- the thirty-four specific names enumerated in Column (1) of Annexe 1, each of which (a) is the specific name of the type species of a genus belonging to the Phyla Protozoa, Coelenterata, Platyhelminthes, Nemathelminthes or Annelida, the name of which was placed on the Official List of Generic Names in Zoology in the period up to the end of 1936 and (b) is the oldest available name for the species concerned;
- (2) the four specific names enumerated in Column (1) of Annexe 2 each of which (a) is currently accepted by specialists as a senior subjective synonym of the specific name of the type species of a genus (i) which belongs to one or other of the Phyla specified in (1) above, and (ii) the name of which was placed on the

280

DIRECTION 77

foregoing *Official List* in the period referred to above, and (b) is considered to be the oldest available such synonym applicable to the species concerned.

ANNEXE 1

Specific names of thirty-four nominal species belonging to the Phyla Protozoa, Coelenterata, Platyhelminthes, Nemathelminthes, and Annelida, each of which (a) is the specific name of the type species of a genus, the name of which was placed on the "Official List of Generic Names in Zoology" in the period up to the end of 1936, and (b) is the oldest available name for the species concerned

Specific name proposed to be placed on the "Official List of Specific Names in Zoology"	Combination in which name specified in Col. 1 was originally published	Name of genus of which species specified in Col. 1 is the type species
(1)	(2)	(3)

CLASS RHIZOPODA

" **Opinion** " 77

vulgaris Ehrenberg, [1830] Arcella vulgaris

Arcella Ehrenberg, [1830]

" Opinion " 127

mantelli Morton, 1833. Nummulites mantelli

Lepidocyclina Gumbel, [1870]

CLASS CILIATA

" **Opinion** " 104

Bursaria truncatella

Bursaria Müller (O.F.), 1773

CLASS	MAS	TIG	OPH	ORA
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" **Opinion** " 75

globator Linnaeus, 1758

truncatella Müller

(O.F.) 1773

Volvox globator

Volvox Linnaeus, 1758 Specific name proposed to be placed on the "Official List of Specific Names in Zoology" (1) Combination in which name specified in Col. 1 was originally published Name of genus of which species specified in Col. 1 is the type species

(2)

(3)

CLASS SPOROZOA

" Opinion " 104

falciformis Eimer, 1870

Gregarina falciformis

Eimeria Schneider, 1875

CLASS NEOSPORIDIA

" Opinion " 104

miescherianum Kühn (J.), 1865

Synchytrium miescherianum Sarcocystis Lankester, 1881

CLASS HYDROZOA

" Opinion " 80

physalis Linnaeus, 1758 Holothuria physalis

Physalia Lamarck, 1801

CLASS ANTHOZOA "Opinion" 117

striatum Fleming, 1828

Lithostrotion striatum

Lithostrotion Fleming, 1828

CLASS CESTODA "Opinion" 77

expansa Rudolphi, 1805 globipunctata Rivolta, 1874 actinioides Diesing, 1835 Taenia expansa

Taenia globipunctata

Thysanosoma actinioides Moniezia Blanchard, 1891

Stilesia Stiles & Hassall, 1893

Thysanosoma Diesing, 1835

DIRECTION 77

Specific name proposed to be placed on the Official List of Specific Names in Zoology" (1)

Combination in which name specified in Col. 1 was originally published

(2)

" **Opinion** " 84 Taenia proglottina

proglottina Davaine, 1860 canina Linnaeus, 1758

avium Bloch, 1782

Taenia canina

" Opinion " 104 Ligula avium

CLASS TREMOTODA

"Opinion "77

appendiculata Fasciola Rudolphi, 1802 appendiculata haematobium Bilharz,

Distoma haematobium

hepatica Linnaeus, 1758 heterophyes Siebold, [1852]

1852

duodenale Dubini,

1843 lumbricoides Linnaeus,

1758

spinigerum Öwen, [1837]

Hemiurus Rudolphi, 1809 Schistosoma Weinland, 1858

" **Opinion** " 84 Fasciola hepatica

Distomum heterophyes

Fasciola Linnaeus, 1758 *Heterophyes* Cobbold, 1866

CLASS NEMATODA

" Opinion " 66

Agchylostoma [sic] duodenale Ascaris lumbricoides

Gnathostoma spinigerum

Ancylostoma Dubini, 1843 Ascaris Linnaeus, 1758 Gnathostoma Owen, [1837]

283

Name of genus of which species specified in Col. 1 is the type species

(3)

Davainea Blanchard & Railliet, 1891 Dipylidium Leuckart, 1863

Ligula Bloch, 1782

Specific name proposed to be placed on the Official List of Specific Names in Žoology " (1)

Combination in which name specified in Col. 1 was originally published

Name of genus of which species specified in Col. 1 is the type species

(3)

(2)

americana Stiles, 1902

Uncinaria americana

retortaeformis Zeder, 1800

Strongylus retortaeformis **Trichostrongylus** Looss, 1905

Necator Stiles, 1903

" Opinion " 104

martis Gmelin, [1790]

schachtii Schmidt,

1871

Heterodera schachtii Strongylus equinus

Filaria martis

equinus Müller (O.F.), 1780

trachea Montagu, 1811 Fasciola trachea

Filaria Müller (O.F.), 1787 Heterodera Schmidt. 1871 Strongylus Müller (O.F.), 1780 Syngamus Siebold, [1852]

CLASS ACANTHOCEPHALA

" **Opinion** " 84

echinodiscus Diesing, 1851

Echinorhynchus echinodiscus

Gigantorhynchus Hamann, 1892

CLASS NEMATOMORPHA

" Opinion " 66

aquaticus Linnaeus, 1758 varius Leidy, 1851

1758

Gordius aquaticus

Gordius varius

Gordius Linnaeus, 1758

Paragordius Camerano, 1897

CLASS HIRUDINEA

" **Opinion** " 75

medicinalis Linnaeus, Hirudo medicinalis Hirudo Linnaeus, 1758

Specific name proposed to be placed on the "Official List of Specific Names in Zoology" (1) Combination in which name specified in Col. 1 was originally published

Name of genus of which species specified in Col. 1 is the type species

(2)

(3)

Limnatis Moquin-Tandon, 1827

Tennent, 1859

Haemadipsa

" Opinion " 104

nilotica Savigny, 1822

Bdella nilotica

Hirudo ceylanica

ceylanica Blainville, [June] 1827

CLASS CHAETOPODA

" **Opinion** " 104

albidus Henle, 1837

Enchytraeus albidus

Enchytraeus Henle, 1837

ANNEXE 2

The specific names of four nominal species each of which is subjectively identified with a nominal species which is the type species of a genus belonging to the Phyla Protozoa, Platyhelminthes and Nemathelminthes, the name of which was placed on the "Official List of Generic Names in Zoology" in the period up to the end of 1936

Specific name proposed to be placed on the "Official List of Specific Names in Zoology" Remarks (not for inclusion in the entry to be made on the "Official List") (2)

(1)

CLASS MASTIGOPHORA

rotatoria Mayer, [July] 1843, as published in the combination *Amoeba rotatoria* a senior subjective synonym of sanguinis Gruby, 1843, as published in the combination Trypanosoma sanguinis, the specific name of the type species of Trypanosoma Gruby, 1843 (Opinion 95)

285

Specific name proposed to be placed on the "Official List of Specific Names in Zoology" Remarks (not for inclusion in the entry to be made in the "Official List") (2)

(1)

CLASS TREMATODA

aegyptiacum Cobbold, 1876, as published in the combination Diplostomum aegyptiacum

dendriticum Rudolphi, 1819, as published in the combination Distoma dendriticum

- a senior subjective synonym of sonsinoii Cobbold, 1877, as published in the combination Gastrodiscus sonsinoii, the specific name of the type species of Gastrodiscus Cobbold, 1877 (Opinion 84)
- a senior subjective synonym of lanceatum Stiles & Hassall, 1896, as published in the combination Dicrocoelium lanceatum (a substitute name for lanceolata Rudolphi, 1803, as published in the combination Fasciola lanceolata (the specific name of the type species of Dicrocoelium Dujardin, [1844]) which is a junior primary homonym of Fasciola lanceolata Schrank, 1790)

CLASS NEMATODA

stercoralis Bavay, 1876, as published in the combination Rhabditis stercoralis a senior subjective synonym of intestinalis Bavay, 1877, as published in the combination Anguillula intestinalis, the specific name of the type species of Strongyloides Grassi, 1879 (Opinion 66)

2. Registration of the present application : Upon the receipt of Mr. Hemming's paper, the question of placing on the Official List of Specific Names in Zoology the specific names of the type

species of genera belonging to the Phyla Protozoa, Coelenterata, Platyhelminthes, Nemathelminthes, and Annelida placed on the *Official List of Generic Names in Zoology* by Rulings given in *Opinions* published in the period up to the end of 1936 was allotted the Registered Number Z.N.(S.) 1126.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

3. Issue of Voting Paper V.P.(O.M.)(56)27 : On 16th November 1956 a Voting Paper (V.P.(O.M.)(56)27) was issued in which each Member of the Commission was asked (1) to state whether he agreed "that, in conformity with the General Directives issued to the International Commission on Zoological Nomenclature by the Thirteenth International Congress on Zoology, Paris, 1948, regarding the placing on the appropriate *Official Lists* and *Official Indexes* of names dealt with in, or otherwise involved in, *Opinions* rendered prior to 1948, the names of species belonging to the Phyla Protozoa, Coelenterata, Platyhelminthes, Nemathelminthes and Annelida referred to in Points (1) and (2) of paragraph 11 of the paper bearing the Registered Number Z.N.(S.) 1126 by the Secretary submitted simultaneously with the present Voting Paper [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Direction*] be placed on the *Official List of Specific Names in Zoology* as there recommended ", and (2) if he did not so agree as regards any item, to indicate that item.

4. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period would normally have closed on 16th December 1956. In view, however, of the possibility of delays in overseas mails consequent upon the abnormally heavy traffic at Christmas time, the Secretary on 16th December 1956 executed a Minute extending the Prescribed Voting Period on the above Voting Paper to 28th December 1956.

5. Particulars of the Voting on Voting Paper V.P.(O.M.)(56)27 : At the close of the Prescribed Voting Period, extended as specified in paragraph 4 above, the state of the voting on V.P.(O.M.)(56)27 was as follows :---

 (a) Affirmative Votes had been given by the following twenty-four
 (24) Commissioners (arranged in the order in which Votes were received):

Mayr; Hering; Vokes; Lemche; Esaki; Kühnelt; Holthuis; Tortonese; Bradley (J.C.); Mertens; Prantl; Miller; Dymond; Stoll; Boschma; Sylvester-Bradley; Cabrera; Bonnet; Hemming; do Amaral; Key; Jaczewski; Riley; Bodenheimer;

(b) Negative Votes :

None;

(c) Prevented from voting by interruption of postal communications consequent upon political disturbances, one (1):

Hankó;

(d) Voting Papers not returned :

None.

6. Declaration of Result of Vote : On 29th December 1956, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.)(56)27, signed a Certificate that the Votes cast were as set out in paragraph 5 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid. 7. Direction as to the insertion of an endorsement of the entry on the "Official List of Specific Names in Zoology" to be made in relation to the specific name "avium" Bloch, 1782, as published in the combination "Ligula avium" and matters consequential thereon : On 17th June 1957 Mr. Hemming, as Secretary, executed the following Minute directing that for the reasons there set out an endorsement in the terms specified in paragraph 5 thereof be made in the entry in relation to the specific name avium Bloch, 1782, as published in the combination Ligula avium, to be inserted in the Official List of Specific Names in Zoology and the other action there specified taken, as part of the decision taken by the International Commission by its vote on Voting Paper V.P.(O.M.)(56)27 :—

The specific name "avium" Bloch, 1782 ("Ligula") and the specific name "intestinalis" Linnaeus, 1758 ("Fasciola") (Class Cestoda)

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

When returning his completed copy of Voting Paper V.P.(O.M.)(56) 27, Professor Tadeusz Jaczewski (*Warsaw*) informed the Office of the Commission that Professor Dr. E. Grabda had raised with him a question relating to the specific name *avium* Bloch, 1782, as published in the combination *Ligula avium*, the specific name of the type species of the genus *Ligula* Bloch, 1782 (Class Cestoda), one of the names dealt with in the foregoing Voting Paper.

2. In this connection Professor Grabda had observed that it was still a matter of discussion among specialists whether the older name *Fasciola intestinalis* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1:649) applied to the same taxon as that represented by the nominal species *Ligula avium* Bloch, 1782.

3. Upon the receipt of Professor Jaczewski's note reporting the information furnished by Professor Grabda, I consulted Dr. Benjamin Schwartz (U.S. Department of Agriculture, Agricultural Research Service, Animal Disease and Parasite Research Division, Beltsville, Maryland, U.S.A.) who in response to my request for advice has very kindly furnished the following additional information (in litt., 13th June 1957) :—

I must agree with Professor Grabda that many, in fact, most helminthologists accept the view that the two names [i.e. *avium* Bloch and *intestinalis* Linnaeus] are synonymous and that the correct name of the tapeworm in question is therefore Ligula intestinalis (Linnaeus, 1758), Gmelin, 1790¹¹. The confusion regarding these two names stemmed from the fact that Bloch and Goeze, who wrote on this species in the XVIIIth century, separated the two forms, which occur, respectively, in the body cavity of fishes and in the intestine of fish-eating birds, on the basis of such characters as localization within the host, length, width, state of contraction, etc. Actually, however, Bloch expressed the view at one time, according to a letter which he wrote to Goeze, that the worm found in fishes was the same as his Ligula avium, 1782, and he assumed moreover that birds became infected by eating parasitized fish. According to Goeze, Bloch later changed his view, not because he carried out feeding experiments with these parasites, but for the reasons previously given in this communication.

Most heminthologists believe, now that the facts in the life history of this tapeworm are well known, that *Ligula intestinalis* is the only species of the genus. The name *Ligula avium* is therefore a synonym, because it was used by Bloch to designate the sexually mature worm of which *Ligula intestinalis* (Linnaeus) is an incompletely developed form. The earlier larval form, as you know, lives in copepods.

4. In the circumstances it appears to me that, while adhering to the decision taken by the Commission on Voting Paper V.P.(O.M.)(56)27 that the specific name avium Bloch, 1782, as published in the combination Ligula avium, be placed on the Official List of Specific Names in Zoology, the proper course in this, as in similar previous cases, will be to apply at the specific-name level the procedure laid down by the Thirteenth International Congress of Zoology, Paris, 1948, for use in analogous cases at the generic-name level, namely (a) to add to the entry on the Official List relating to the specific name avium an endorsement that it is placed on the List for use by any author who on taxonomic grounds may take the view that the taxon represented by the nominal species Ligula avium Bloch, 1782, is different from that represented by the nominal species Fasciola intestinalis Linnaeus, 1758, as published in the combination Fasciola intestinalis.

5. Accordingly, as Secretary, I hereby direct that in the Ruling to be incorporated in the *Direction* giving effect to the vote taken by the Commission on Voting Paper V.P.(O.M.)(56)27 there be added

¹¹ The reference here to Gmelin is to the fuller treatment of this nominal species by Gmelin in [1791] (*in* Linnaeus, Syst. Nat. (ed. 13) 1(6) : 3042) under the name Ligula intestinalis.

to the entry relating to the specific name avium Bloch, 1782, as published in the combination Ligula avium, to be made on the Official List of Specific Names in Zoology an endorsement in the terms specified in paragraph 4 of the present Minute and that at the same time the specific name intestinalis Linnaeus, 1758, as published in the combination Fasciola intestinalis be entered on the said Official List.

8. Preparation of the Ruling given in the present "Direction": On 17th June 1957 Mr. Hemming prepared the Ruling given in the present *Direction* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission by its vote on Voting Paper V.P.(O.M.)(56)27, subject to the drafting amendment relating to the form of the entry to be made on the *Official List of Specific Names in Zoology* in relation to the specific name *avium* Bloch, 1782, as published in the combination *Ligula avium*, as specified in the Minute executed by the Secretary on 17th June 1957, the text of which has been reproduced in paragraph 7 of the present *Direction*.

9. Original References : The original references for the specific names placed on the Official List of Specific Names in Zoology by the Ruling given in the present Direction have already been noted in connection with the Official List of Generic Names in Zoology, the nominal species bearing the names concerned being either (i) the type species of genera, the names of which have been inscribed on that List or (ii), in four cases, nominal species which are in each case currently subjectively identified as representing the same taxon as that represented by a nominal species which is the type species of such a genus.

10. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Direction* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

11. The present *Direction* shall be known as *Direction* Seventy-Seven (77) of the International Commission on Zoological Nomenclature.

DONE in London, this Seventeenth day of June Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

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292